

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 Claims 1-24 (cancelled).

Claim 25 (new): A modular welding system, comprising:

- (a) a basic component system having an operator control module which controls a power supply and controls a wire feeder; and
- 10 (b) a plurality of modular fixture component systems which interface with said basic component system, each of said modular fixture component systems controlled by said operator control module and having a particular fixture assembly which performs a particular type of weld.

15 Claim 26 (new): The welding system of claim 25, wherein said basic component system further comprises a power supply control module which communicates inputs from said operator control module to said power supply.

Claim 27 (new): The welding system of claim 26, wherein said basic component
20 system further comprises a wire feeder control module which communicates inputs from said operator control module to said wire feeder.

Claim 28 (new): The welding system of claim 27, wherein said basic component system further comprises an articulated boom which is configured to receive said modular fixture component system.

- 5 Claim 29 (new): The welding system of claim 28, wherein said modular fixture component system comprises a weld torch which receives said at least one welding wire from said wire feeder.

- Claim 30 (new): The welding system of claim 29, where said modular fixture
10 component system comprises an oscillator slide configured to oscillate said weld torch.

- Claim 31 (new): The welding system of claim 30, wherein said modular fixture component system comprises an oscillator control module in communication with
15 said operator control module, said oscillator control module configured to control said oscillator slide.

Claim 32 (new): The welding system of claim 29 wherein said modular fixture component system includes a stiffener fixture frame.

Claim 33 (new): The welding system of claim 29 wherein said modular fixture component system includes a butt/tee fixture frame.

Claim 34 (new): A modular welding system having a basic component system

5 which comprises:

a boom configured to receive at least one welding wire, said boom configured to provide a mechanical and electrical interface to a plurality of modular fixture component systems, each of said plurality of modular fixture component systems having a particular assembly that performs a particular type of weld;

10 a wire feeder coupled to said boom, said wire feeder configured to transfer said at least one wire across said boom; and

an operator's control module configured to control said wire feeder.

Claim 35 (new): The basic component system of claim 34 further comprising a wire

15 feed control module which receives wire feed signals from said operator's control module and controls the communications of said wire feed signals to said wire feeder.

Claim 36 (new): The basic component system of claim 35 further comprising a power supply control module which receives power supply signals from said operator's control module and controls the communications of said power supply signals to a power supply.

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Claim 37 (new): The basic component system of claim 36 further comprising a wire straightener which straightens said at least one wire transferred by said wire feeder.

Claim 38 (new): A modular fixture component system that interfaces mechanically and electrically with a basic component system, said basic component system having an operator control module that controls actions performed by said modular fixture component system, comprising:

a weld torch configured to receive at least one welding wire from a wire feeder, said weld torch also configured to receive a consumable guide tube which receives said at least one wire, said weld torch configured to communicate power generated by a power supply to said guide tube; and

an oscillator slide configured to oscillate said weld torch.

Claim 39 (new): The modular fixture component system of claim 38 further comprising at least one manual slide to position said weld torch.

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Claim 40 (new): The modular fixture component system of claim 39 further comprising an oscillation control module which controls said oscillator slide.

Claim 41 (new): The modular fixture component system of claim 40 further
5 comprising a weld torch rotator configured to rotate said weld torch.

Claim 42 (new): The modular fixture component system of claim 41 further comprising two weld shoes which define a weld cavity which receives said guide tube.

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Claim 43 (new): The modular fixture component system of claim 42 having a stiffener fixture frame.

Claim 44 (new): The modular fixture component system of claim 42 having a
15 butt/tee fixture frame.

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Claim 45 (new): A modular welding system comprising:

a basic component system including:

an operator control module which controls a power supply and
controls a wire feeder,

5 a power supply control module which communicates inputs from said
operator control module to said power supply.

a wire feeder control module which communicates inputs from said
operator control module to said wire feeder.

an articulated boom;

10 a modular fixture system configured to interface with said articulated boom,
said modular welding system having a weld torch which receives said at least one
welding wire from said wire feeder, said modular fixture component system
controlled by said operator module, and said modular fixture component system
includes a stiffener fixture frame.

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Claim 46 (new):

A modular welding system, comprising:

a basic component system, comprising:

an operator control module which controls a power supply and

5 controls a wire feeder,

a power supply control module which communicates inputs from said
operator control module to said power supply.

a wire feeder control module which communicates inputs from said
operator control module to said wire feeder.

10 an articulated boom;

a modular fixture system configured to interface with said articulated boom,
said modular welding system having a weld torch which receives said at least one
welding wire from said wire feeder, said modular fixture component system
controlled by said operator module, and said modular fixture component system

15 includes a butt/tee fixture frame.

Claim 47 (new): A modular welding system having a modular fixture component system, comprising:

- 5 a weld torch configured to receive at least one welding wire from a wire feeder, said weld torch also configured to receive a consumable guide tube which receives said at least one wire, said weld torch configured to communicate power generated by a power supply to said guide tube;
- at least one manual slide to position said weld torch;
- a weld torch rotator configured to rotate said weld torch;
- two weld shoes which define a weld cavity which receives said guide tube;
- 10 an oscillator slide configured to oscillate said weld torch;
- an oscillation control module which controls said oscillator slide; and
- a stiffener fixture frame.

Claim 48 (original): A modular welding system having a modular fixture component system, comprising:

- a weld torch configured to receive at least one welding wire from a wire feeder, said weld torch also configured to receive a consumable guide tube which receives said at least one wire, said weld torch configured to communicate power generated by a power supply to said guide tube;
- at least one manual slide to position said weld torch;
- a weld torch rotator configured to rotate said weld torch;
- two weld shoes which define a weld cavity which receives said guide tube;
- an oscillator slide configured to oscillate said weld torch;
- an oscillation control module which controls said oscillator slide; and
- a butt/tee fixture frame.